



Department of Public Works

500 S Grand Central Pky | Box 554000 | Las Vegas NV 89155-4000
(702) 455-6000 | www.ClarkCountyNV.gov/PubWorks

Denis Cederburg, P.E.
Director of Public Works and County Engineer

ABOUT PUBLIC WORKS

Public Works is one of the largest departments within Clark County government. Under the general direction of the Board of County Commissioners and the County Manager, the department is responsible for administering specific portions of the following ordinances:

Title 5 - Franchises (Right-of-Way Management)
Title 14 -Traffic
Title 16 -Roads and Highways (Permitted Roadway Uses)
Title 30 -Unified Development Code

The Department of Public Works delivers a wide range of services to the community including the design, construction, inspection and maintenance of essential road and infrastructure such as roadways, bridges, traffic control devices, flood control facilities and trails and is responsible for the proper stewardship of revenues expended for these purposes.

Contact us

Main Office

Clark County Government Center
500 S Grand Central Pkwy - 2nd Floor

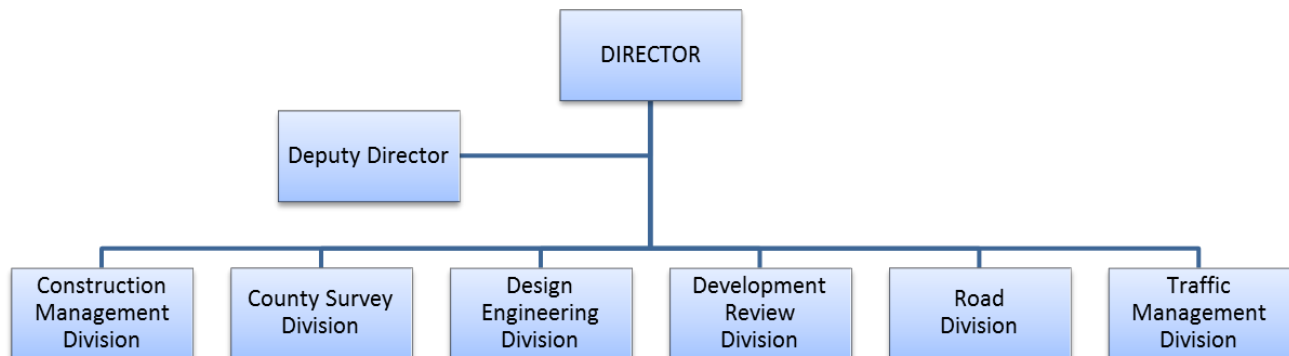
Telephone: (702) 455-6000

Email: InTheWorks@ClarkCountyNV.gov

Website: www.ClarkCountyNV.gov/PubWorks

Divisions

The Public Works Department is comprised of the Director's Office and six Divisions:



ABOUT PUBLIC WORKS

The primary functions of our department involve the design, construction, inspection and maintenance of essential public infrastructure consisting of:

- Local, collector, and arterial **roadways**, the Clark County 215 Bruce Woodbury Beltway and **curbs, sidewalks and medians** in public rights-of-way including the "Welcome to Fabulous Las Vegas" Sign median & parking lot.
- Structures such as retaining walls, bridges, multi-use and **pedestrian bridges** including those located on Las Vegas Boulevard from Flamingo Road to Spring Mountain Road.
- Flood control facilities including multi-purpose regional **detention basins** and **wash channels** with recreational parks and **trails**, as well as **storm drain** systems to mitigate local area drainage issues.
- Traffic control and safety signage, pavement markings such as **crosswalks** and lane striping, **school flashing beacons**, **street lighting** and **traffic signal** operations.
- Technical review, permitting and inspections of **developer off-site improvement plans** to ensure infrastructure is built to County Code and standards are met.
- General **permits and inspections** for encroachments on County right-of-way.
- **Vector control** to abate bees, weeds and other pests as well as provide pest control for County building and in County right-of-way.
- **Newsrack permitting** per County Code Chapter 16.08, regulation of newsracks within the H-1 zoning district. Permits are issued annually through a lottery process.
- **One-Call** location services as part of the national 8-1-1 Call Before You Dig program to identify storm drain lines.
- **Special event** permits as required to conduct an event that may affect the normal flow of vehicular and/or pedestrian traffic on public right-of-ways.

Accreditation

Clark County Public Works received national accreditation by the American Public Works Association for our compliance with recommended public works management practices. The American Public Works Association created the accreditation process to assist public works agencies with improvement of their operations and management, to provide education and training of public works professionals, and to provide a valid and objective evaluation of agency programs. Clark County Public Works was the first such agency in the State of Nevada to be given this honor and remains one of only two in the state.

TRANSPORTATION PLANNING

Designated under federal law as the Metropolitan Planning Organization, the Regional Transportation Commission (RTC) is responsible for overseeing the transportation planning process for Southern Nevada. The Regional Transportation Plan (RTP) is a long-range transportation plan that describes the regional strategic transportation investments expected to be completed in Southern Nevada over the next 20 years. The Transportation Improvement Plan (TIP) identifies regionally significant roadway, transit, bikeway, and pedestrian safety transportation improvement projects to be funded over a 5-year period. The RTP and TIP are developed in cooperation with the U.S. Department of Transportation, Nevada Department of Transportation, Clark County, and the cities of Boulder City, Henderson, Las Vegas, North Las Vegas and Mesquite. The RTP and TIP are available on the [RTC website](#).

The [Clark County Transportation Element](#) is intended to provide information to the public on future transportation needs in the context of projected growth and development. Pursuant to Clark County Unified Development Code, Title 30 provides for the dedication of a 100-foot right-of-way on each section line, an 80-foot right-of-way on each quarter section line, and a 120-foot right-of-way on township and range lines. This “grid system” of roadways serves as the “historic” plan for the Las Vegas Valley road network. New streets are built in accordance with a functional classification system of streets and highways. Functional class encompasses all categories of roadways from freeways that carry high volumes of traffic from one region to another, to local roads that provide access to individual parcels of land.

The transportation portion of the [Capital Improvements Program \(CIP\)](#) is designed to fulfill the County’s mission to provide a quality transportation system at the right time and cost. The CIP is defined as a schedule for future improvements over a specific timeframe, together with cost estimates and anticipated fund sources. The priority of projects is normally defined by the year of implementation (i.e. first year projects generally are higher priority than year 5 projects). The transportation portion of the CIP is approved annually by the Board of County Commissioners.

FUNDING SOURCES

Clark County meets its transportation infrastructure needs primarily by constructing improvements with federal, state and local funds. Funding may be derived from a number of sources including Master Transportation Plan (MTP) bonds, equity funding such as the one percent motor vehicle privilege tax (MVPT), and state or federal grants like the Southern Nevada Public Land Management Act (SNPLMA) –a distribution of funds to support the development of parks and trail improvements in Southern Nevada.

Fair Share Transportation Funding Program

In November 1990, voters approved an advisory ballot question that was subsequently enacted by the 1991 Nevada State Legislature as Senate Bill 112. This bill authorized the County to implement a "fair share" tax program to support roadway improvements and mass transit throughout the Las Vegas Valley. Clark County Public Works receives project funds from the following four revenue sources:

Plan Element	Revenue Sources	Nevada Revised Statute (NRS)
Resort Corridor	One percent Room Tax	244.3351
Beltway	One percent Motor Vehicle Privilege Tax	371.045
Beltway	Development Tax	278.710
Arterial Streets	Nine cent Motor Vehicle Fuel Tax (administered by RTC)	373.030

A November 2002 voter-approved advisory question, and approval in May 2003 by the Nevada State Legislature, provided the state and county governments with the authority to raise an additional \$2.7 billion over the next 25 years by doubling the development tax over 20 years and increasing sales tax by one quarter of one percent. This additional funding will be used to help fund beltway widening (which is already carrying more than its design capacity in some stretches) along its entire length, with the capability for future expansion to ten lanes.

The principal revenue source for the beltway project is one percent supplemental Motor Vehicle Privilege Tax, and a new development tax currently at \$700 per residential unit and 75 cents per square foot of commercial construction.

- **Senate Bill 5 (SB5) & Question 10 (Q10):** SB5 was passed during the Nevada Legislature's 2010 Special Session to allocate additional streets & highways funding to the RTC from the Petroleum Clean-up fund. SB5 also allowed Legislature to lift the sunset on a temporary sales tax increase that was passed by voters in 2003 – the Clark County Advisory Question No. 10 (Q10): Fair Share Transportation Funding Program. These funds are used to rehabilitate pavement on a number of urban and rural roadways in Southern Nevada, project information is available on the [RTC website](#).
- **Fuel Revenue Indexing (FRI):** September 2013, the Board of County Commissioners approved an ordinance to index fuel revenue to inflation from January 2014 through December 2016. Fuel revenue is generated each time a motorists fill up their vehicles with gas. A portion of what we pay at the pump helps fund transportation projects throughout Clark County. This funding measure will help keep up with materials and labor costs, raise \$700 million in bonding capacity, fund 199 projects and create more than 9,000 jobs. For motorists, this averages out to about a dime a day over the next three years. FRI funded projects are listed on the [RTC website](#).

FUNDING SOURCES

Resort Corridor Improvements

The easing of traffic congestion in resort areas, particularly the Resort Corridor (centered around the portion of Las Vegas Boulevard from Sahara Avenue to Russell Road), is critical to the continued economic health and stability of Clark County's tourism industry. The collection of **one percent room tax** is allocated to Resort Corridor projects. To date, more than **\$400 million** of the available resources have been applied to actual construction, with the balance dedicated to debt service costs and reserves. **Projects on Desert Inn Road, Harmon Avenue, Paradise Road, Sunset Road, and Valley View Boulevard** are considered the highest priority projects for available funding.

Road Maintenance Fund

Although the emphasis on new roadway construction may appear to overshadow other arterial improvement efforts, the County is equally committed to maintaining and repairing existing streets, particularly those in older neighborhoods. Consequently, pavement rehabilitation, gravel road paving and street sweeping programs are ongoing in both rural and urban areas of the County. In accordance with Nevada Revised Statute (NRS) Chapter 365, Sections 180, 190, and 192, Clark County receives **a share of 6.35 cents per gallon of gas** sold in Nevada. This amounts to approximately **\$24 million** per year. According to the governing law, all of this money must be spent on road maintenance. Currently, Clark County does not receive any share of the Special Fuels tax. Special fuels include diesel, propane and methane.

Gas Tax Revenue Example			
Clark County		NDOT	
\$23.6M	Portion of 6.35¢ share per gallon	\$89.9M	17.65¢ per gallon
\$0	Special Fuels	\$79.6M	Special Fuels
2500*	Centerline miles maintained countywide	5601*	Centerline miles maintained statewide
\$9,436*	Per mile**	\$49,898*	Per mile**

* Estimated amounts from FY2009

** Centerline miles do not account for road widths and multiple lanes maintained

Special Improvement Districts (SIDs)

Through the Consolidated Local Improvement Law (Chapter 271 of the Nevada Revised Statutes) counties, cities and towns are allowed to form SIDs for the purpose of acquiring, improving, equipping, operating, and maintaining specific projects within their jurisdictions. These Districts were established as a tool to finance local public improvements at a lower rate of interest than conventional loans. **Projects include improvements to streets, curbs and gutters, sidewalks, streetlights, and driveways.** Property owners within a defined district are assessed for their benefited share of the improvements. The Special Assessment Capital Construction Fund accounts for various municipal bond proceeds used for the construction of improvements within the established County Special Improvement Districts.

MAINTENANCE SERVICES

Traffic Control Devices: Maintenance & Operations

Please review the [Traffic Safety Info flyers on our website](#) for detailed information.

Traffic signals may be installed as part of an intersection improvement effort, as a component of a larger road project-- or by a private developer whose project is expected to generate traffic impacts in the immediate area. The participation level required of each developer is proportional to the incremental traffic impacts created by the new development. The average cost per signal can range from \$200,000 to more than \$500,000 depending on the width of the roads. Once traffic signal system projects are inspected and found to meet County Code, they are activated and accepted by the County for maintenance of operation by our **Traffic Signals Unit**. Traffic signal coordination is managed for all of Clark County by the [RTC Freeway and Arterial System of Transportation](#).

Warranted traffic signals installed in accordance with Nevada Revised Statute 484.781 can provide the following benefits:

- promote the orderly flow of travel along major routes
- allow cross traffic to move with minimum delay and maximum safety
- reduce the frequency of certain types of accidents, such as right-angle collisions, and reduce vehicle emissions

In cooperation with the Nevada Department of Transportation (NDOT) new four-head signal displays with **flashing yellow arrow** capability were installed at 172 signalized intersections in unincorporated Clark County. Inspection and activation was completed entirely by the County in-house traffic signal technicians in addition to their normal workload of maintaining more than 525 signalized intersections.

NDOT's decision to implement the flashing yellow arrow in Nevada was based on a national study conducted for the Federal Highway Administration demonstrated that the new indication helps to prevent crashes, increase intersection capacity and provides additional traffic management flexibility. [Please visit our website](#) for more information about the project and intersections impacted.

The **Streetlighting Unit** is responsible for the maintenance, upgrade and repair of streetlights and electrical service points throughout Clark County. Streetlight poles are replaced when severely damaged from accidents or when potential safety and liability problems exist due to deterioration. Clark County Public Works Traffic Management also provides streetlight maintenance services on state highways within Clark County through an intergovernmental agreement with Nevada Department of Transportation. In recent years, copper wire theft has been an ongoing concern costing millions in taxpayer dollars to replace.

The **Traffic Sign and Pavement Marking units** perform maintenance services on County road traffic control signs and pavement markings. These activities include the installation, repair, maintenance, and removal of traffic signs, street name signs and pavement markings; and the testing and evaluation of new traffic control materials and devices. The most common requests received are for the installation or removal of stop signs. A stop sign assists drivers and pedestrians to determine who has the right-of-way at an intersection. **Stop signs are intended to stop traffic, not control speeds.** In fact, traffic studies have indicated that accidents actually increase when stop signs are used improperly. A variety of other measures can be used to address local traffic issues such as limited parking near intersections to improve driver visibility and reduce accidents.

Citizens may submit a written request to Public Works via email (InTheWorks@ClarkCountyNV.gov) for repair; review of existing-- or to suggest new --traffic control devices in unincorporated Clark County. For issue with **enforcement**, such as speeding, please contact your nearest Las Vegas Metropolitan Police Dept substation for assistance.

MAINTENANCE SERVICES

Roadway & Flood Control Facilities Maintenance

Routine maintenance of roadways is essential, efficient and cost-effective to sustain streets in good condition. The following high-quality maintenance programs are aimed at extending pavement life and improving levels of road serviceability. In-house staff is coordinated to maintain more than 2500 lane miles of roadway.

- **Crack sealing** is the application of a liquid asphalt/rubber compound injected into cracks and voids in existing pavement. Pavement life is extended by preventing water and other extreme elements from entering and deteriorating pavement surfaces.
- **Pothole Patching** is a process routinely used to repair minor irregularities in pavement surfaces. These irregularities can cause hazardous conditions and, in most instances, require immediate attention.
- **Gravel Roadways** are maintained on more than 500 miles of native soil and gravel roadways in Clark County. The majority of these roadways is located in the rural areas of the county and primarily provides residential access. Gravel roadway grading usually occurs when the surface is eroded to the point where a hazardous or unsafe condition may eventually result.
- **Street Sweeping** is a vital public service that not only improves the appearance of neighborhoods, but also helps prevent air pollution removing street dust that can be circulated by traffic. In the street sweeping process, storm drain inlets are also cleaned. Sweepers cycle through each respective central valley route in a seven to ten day period. Outlying area routes are covered approximately every 30 days. Each sweeper picks up six to eight cubic yards of debris on a regular daily route. That amounts to capturing approximately 20,000 cubic yards of debris a year. As the seasons change from fall to winter, the average volume generally increases four-fold due to foliage droppings into curbs and gutters.
- **Snow and Ice Maintenance** is necessary in the upper elevations of Clark County in areas such as Mt. Charleston, Kyle Canyon, Columbia Pass, Mountain Springs, and Cold Creek. Snow removal is accomplished using typical road maintenance equipment and two truck plows. In addition, we utilize two rotary snow blowers when snow depth exceeds our capacity to plow, which allows us to provide service with considerably greater efficiency.

In addition to the efforts of in-house staff, Public Works contracts with outside firms for both routine and specialized pavement maintenance activities. These projects maximize the value of the County's roadway assets by: extending useful life, remediating badly deteriorated roadway sections and by bringing County roadways into compliance with the Americans with Disabilities Act (ADA). Over the past nine years, more than \$60 million in local gas tax monies have been directed toward this effort.

- **Slurry seals** are mixtures of fine-graded sand and aggregates with quick setting asphalt emulsions. These are typically used on pavements that are 5 to 15 years old to extend the life of pavement by sealing out water and shielding the asphalt from oxidation due to ultraviolet rays.
- **Pulverize and pave** projects involve grinding up the existing asphalt on older, more deteriorated streets and recycling it as a high-quality base for an new layer of asphalt paving.
- **ADA compliance** provides wheelchair ramps at intersections or the replacement of non-conforming intersection wheelchair ramps which do not meet applicable standards.
- **Flood Control Maintenance** crew's activities are supplemented each year by an annual maintenance contract. The contractor provides equipment and personnel to complete a myriad of activities associated with the Flood Control infrastructure. This includes but is not limited to, inspections, channel debris removal, concrete repair, fence repair and replacement, box culvert cleaning, and detention basin maintenance.

FAST FACTS

1. **Las Vegas Strip:** The State of Nevada relinquished ownership of Las Vegas Boulevard South (from Russell Road to Sahara Avenue) to Clark County in 2003. CCPW maintains the pedestrian bridges on Las Vegas Blvd from Flamingo to Spring Mountain. NDOT currently maintains the pedestrian bridges at Tropicana.
2. **Welcome to Fabulous Las Vegas Sign:** The sign is leased to Clark County by YESCO and is installed on a median maintained by CCPW. In 2008, CCPW constructed a small parking lot in the median that now allows the millions of visitors' safe access to the sign. In 2009, the sign was listed with the National Register of Historic Places. An improvement project at the median including additional parking spaces and a pedestrian crossing signal is currently under construction in 2014.
3. **Clark County 215 Beltway:** At more than \$2 billion, the 53-mile full-freeway beltway facility "clocks-in" as the most expensive road project in southern Nevada history and the largest scope since U.S. 95 was expanded from a surface highway into a limited access freeway.
4. **Clark County 215 Beltway:** After completing the full 53-miles of the initial 215 Beltway facility in 2004, the Las Vegas Beltway was renamed as the Bruce Woodbury Beltway, honoring Commissioner Woodbury's dedicated leadership on the Master Transportation Plan. A small section of the southern 215 Beltway is designated as Interstate 215 (I-215) and maintained by NDOT from I-15 to Windmill Lane and near Stephanie St to US 95/93.
5. **Traffic Signals:** CCPW maintains the traffic signal systems at more than 525 intersections throughout unincorporated Clark County. This is approx. 45% of the signalized intersections in southern Nevada and over 100 more than all of traffic signals in northern Nevada's Truckee Meadows region. Traffic signal timing and cycles are networked by RTC's Freeway and Arterial System of Transportation (FAST).
6. **Service Requests:** On average, each year CCPW responds to 93% of 3000+ roadway maintenance requests within 24 hours. Traffic signal and stop sign requests are responded to on a 24-hour basis and dispatched by LVMPD after-hours.
7. **Vehicle Miles Traveled on County roads:** According to an NDOT study, in 2008 there were approximately 21 billion vehicle miles of travel (VMT) on Nevada's improved roads. 65% of the state's total vehicle miles of travel are on Clark County roads.
8. **Miles of Road maintained:** There are approximately 26,275 miles of improved roads in the state of Nevada. Clark County Public Works maintains more than 2,500 miles of improved roads or nearly half of what is maintained by NDOT and close to 10% of the state's total.
9. **Flood Control Facilities:** Clark County maintains the regional flood control facilities within our jurisdiction – over 40% of the entire region's total. On average, we are reimbursed approx. \$3 million by the Regional Flood Control Districts Maintenance Works Plan.

FREQUENTLY ASKED QUESTIONS

1. What are the future plans for specific roadways in Clark County?

The Transportation Element of the Clark County Comprehensive Plan is intended to provide information to the public on future transportation needs in the context of projected growth and development. It highlights not only the transportation facilities and elements already defined within Clark County Code, but also addresses the needs of development as approved by Clark County.

Designated under federal law as the Metropolitan Planning Organization, the Regional Transportation Commission (RTC) is responsible for overseeing the transportation planning process for Southern Nevada. The Regional Transportation Plan (RTP) is a long-range transportation plan that describes the regional strategic transportation investments expected to be completed in Southern Nevada over the next 20 years. The Transportation Improvement Plan (TIP) identifies regionally significant roadway, transit, bikeway, and pedestrian safety transportation improvement projects to be funded over a 5-year period. The RTP and TIP are developed in cooperation with the U.S. Department of Transportation, Nevada Department of Transportation, Clark County, and the cities of Boulder City, Henderson, Las Vegas, North Las Vegas and Mesquite. The RTP and TIP are available on the [RTC website](#).

2. Why aren't there bike lanes on every street?

The Regional Transportation Commission of Southern Nevada (RTC) is committed to making cycling a greater part of improving mobility in Southern Nevada and that commitment is represented in the RTC's Alternative Transportation Mode Master Plan including a master plan of pedestrian and bicycle facilities. The RTC's plan seeks to extend alternative modes of travel by linking bicycle facilities to the farthest reaching points of transit service. More information is available on the RTC website..

3. Why are there so many roads under construction at one time?

Driven by the tremendous growth experienced in this area during the last two decades, an ambitious roadway and infrastructure construction effort is underway in the Las Vegas Valley. Clark County's population and tourism growth since the 1980s has far outpaced measures taken to increase roadway system capacity. The current population in Clark County is more than 2 million residents in addition to millions of tourists. To ensure that our transportation network provides for the safe and efficient movement of people, goods and services, a number of road improvement projects were "jump-started" or "fast-tracked" before gridlock and deteriorating air standards adversely affect our economic base and quality of life. In addition to road improvements being completed by local agencies and the Nevada Department of Transportation, developers and utility companies also work on the roads and public right-of-ways to meet the needs of an ever-growing community.

4. Why are roads torn up almost immediately after work on them is finished?

In accordance with the County's No-Cut Ordinance, a newly constructed street cannot be torn up again for a period of five years unless an emergency exists. Nonetheless, during construction of a project, a street may be temporarily patched after underground work has been completed. Patches cover any opening that may have been made on the surface of the street, and allow cars to continue using the roadway. After all underground facilities are installed or repaired, temporary patches are removed, and the permanent paving is finally poured. As a result, it may appear that a street is being "ripped-up" more than once.

FREQUENTLY ASKED QUESTIONS

5. What are the factors in determining whether work is done at night?

Construction may be conducted at night in areas where daytime traffic volumes are high in an effort to minimize disruptions to the motoring public and surrounding businesses. Nevertheless, working at night can be disruptive to residential neighborhoods, makes obtaining specific types of materials difficult, and is more hazardous to work crews. In light of these circumstances, the decision to work at night must be carefully considered. As an alternative, work may be conducted during early morning hours, which is another “off-peak” travel time.

6. Why not build one project, finish it, and go on to another?

The need to upgrade local roadways is so great that working on a project-by-project basis would make it impossible to catch up with current traffic demands or get ahead of future growth. Clark County is committed to completing a supporting network of roadways in conjunction with the opening of major freeway, resort corridor and beltway projects.

7. Why don't the various entities coordinate their efforts?

To the greatest extent possible, public and private sector organizations work together when planning and constructing road projects. However, coordination does not always mean that all work-related conflicts can be identified or avoided prior to the start of a project. A variety of mechanisms (i.e., utility and project coordination meetings, partnering agreements, etc.) serve to minimize construction-related conflicts.

8. Why do we see road equipment or lanes blocked off when no one is working?

Typically, roadwork is conducted between the hours of 7 a.m. and 3 p.m. Sometimes, however, work may be taking place at night or may be underway in a location further down the road. Unforeseen problems such as underground leaks, utility conflicts, and bad weather can contribute to work delays.

9. Why don't projects start and finish on time?

For the most part, County road projects start on time. It is not uncommon, however, for completion dates to be extended when necessary work items are added during the course of construction. In addition, procedures are in place to charge contractors for damages for each day the project exceeds the authorized date of completion.

Please email your questions, comments, and concerns to the Public Works department at InTheWorks@ClarkCountyNV.gov .

PUBLIC SERVICE COMMITMENT

In 1991, the Board of County Commission approved a resolution expressing a commitment to the public for the road and other projects contained within the Clark County Master Transportation Plan. Over thirteen years later, the Clark County Department of Public Works staff continues to follow the tenets set forth in the resolution as follows:

1. To the greatest extent possible, perform roadwork with minimum disruption to traffic flow.
2. To the greatest extent possible, coordinate with impacted commercial and residential property owners before and during actual roadwork.
3. To the greatest extent possible, perform roadwork during non-peak hours.
4. To the greatest extent possible, coordinate other public works projects in conjunction with roadwork projects to minimize cost and increase speed of completion.
5. To the greatest extent possible, coordinate with other public works projects to avoid subsequent additional work along newly completed road projects.
6. To the greatest extent possible, maximize funding capability, pursuing federal funds, bonding, joint ventures, and other forms of financing to expedite road project completion.
7. To the greatest extent possible, inform the public in advance of pending roadwork and inform the public of work status, anticipated completion dates, and other important information on road projects throughout the life of the projects.
8. To the greatest extent possible, coordinate planning and plan implementation to address overall transportation needs, including but not limited to surface access improvements and mass transit demand.
9. To act as responsible partners with the local community in providing adequate, well-planned transportation facilities, infrastructure and services.
10. To address quality of life issues in transportation planning, including but not limited to air quality access to public services, convenience and cost of public transportation, managed growth and economic stability.